

REMARKS

At the outset, Applicant thanks the Examiner for the thorough review and consideration of the subject application. The Non-Final Office Action of May 26, 2004 has been received and its contents carefully reviewed.

In the Office Action, the Examiner rejected claims 1-8, 10-23, 25, and 26 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figures 1 and 2 in view of Suzuki et al. (U.S. Patent No. 5,739,880); rejected claims 24 and 29 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figures 1 and 2 in view of Suzuki et al. and further in view of Kashima et al. (U.S. Patent No. 6,504,589); rejected claim 32 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figures 1 and 2 in view of Nagakubo et al. (U.S. Patent No. 6,313,891); and objected to claims 27, 28, 30, and 31 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the elements of the base claim and any intervening claims.

Applicant appreciates the indication of allowable subject matter in claims 27, 27, 30, and 31 and hereby amends claims 1, 15, 25, and 26 to include the respective elements of claims 27, 28, 30, and 31. Accordingly, Applicant respectfully submits claims 1, 15, 25, and 26, and their various dependent claims are in condition for immediate allowance.

The rejection of claims 24 and 29 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figures 1 and 2 in view of Suzuki et al. and further in view of Kashima et al. is traversed and reconsideration is respectfully requested.

Claim 24 is patentable over the related art shown in Figures 1 and 2 in view of Suzuki et al. and further in view of Kashima et al. in that claim 24 recites a combination of elements including, for example, “a second substrate having first and second surfaces, wherein the first surface is disposed against the first substrate... and a sheet material disposed between a light source and the second substrate, the sheet material comprising an uppermost sub-layer having a first length and at least one underlying sub-layer arranged under the uppermost sub-layer and having a second length, wherein the first length is substantially equal to the second length.” Neither the related art shown in Figures 1 and 2, Suzuki et al., nor Kashima et al., singly or in combination, teach or suggest at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claim 29, which depends from claim 24, is also patentable

over the related art shown in Figures 1 and 2 in view of Suzuki et al. and further in view of Kashima et al.

The Examiner cites the related art shown in Figures 1 and 2 as failing to disclose “the sheet material comprising an uppermost sub-layer having a first length and at least one underlying sub-layer arranged under the uppermost sub-layer and having a second length, and the first length is substantially equal to the second length.” Moreover, the Examiner cites Suzuki et al. as failing to disclose “the sheet material layers have equal lengths.” Attempting to cure the deficiencies of the related art shown in Figures 1 and 2 and Suzuki et al., the Examiner cites Kashima et al. as teaching a “conventional backlight system... using diffusion sheet (25)... and prism sheet (26)... having equal lengths (see Fig. 11).” The Examiner then alleges “using equal lengths for the... prism sheet and the diffusion sheet would be easy to manufacture and would have sufficient luminance in a high efficiency.” The Examiner concludes the rejection by stating it would have been obvious “to use equal lengths for the ...prism sheet and diffusion sheet as claimed in claim 24 for achieving sufficient luminance in a high efficiency.”

According to M.P.E.P. § 2144.02, the rationale to support a rejection under 35 U.S.C. § 103 may rely solely on logic and sound scientific principle. However, when an Examiner relies on a scientific theory, evidentiary support for the existence and meaning of that theory must be provided.

From the Examiner’s theory, it appears that providing a prism sheet and a diffusion sheet having equal lengths as taught by Kashima et al. would enable one of ordinary skill in the art to achieve “sufficient luminance in a high efficiency,” thus rendering the claimed invention obvious.

Applicant respectfully submits, however, evidentiary support for the existence and meaning of the Examiner’s theory outlined above must be, but has not been, provided. Furthermore, Applicant respectfully submits there is no relationship between relative lengths of adjacent prism and diffusion sheets and the ability to achieve “sufficient luminance in a high efficiency,” as asserted by the Examiner. In the absence of any evidentiary support, Applicant respectfully submits the related art shown in Figures 1 and 2, Suzuki et al., and Kashima et al. have merely been combined using the presently claimed invention as a template via improper hindsight reasoning.

In the last paragraph at page 7 of the present Office Action, the Examiner states “[t]he evidentiary support is that... [Kashima et al.] discloses (col. 1, lines 20-33; Fig. 1) that the structure having diffusion sheet and prism sheet (equal length) is a typical conventional backlight system structure.” It is respectfully submitted, however, that the mere existence of diffusion and prism sheets with particular alleged dimensions does not constitute evidentiary support for the existence and meaning of the theory that providing a prism sheet and a diffusion sheet having equal lengths would enable one of ordinary skill in the art to achieve “sufficient luminance in a high efficiency,” as asserted by the Examiner. After reviewing Kashima et al. Applicants respectfully submit that the specification of Kashima et al. is completely silent with respect to relative dimensions of sub-layers within a sheet material. Moreover, it appears that Kashima et al. discloses wherein “sufficient luminance in a high efficiency” is attributable to a combination of light source, a light guide, a polarization light splitter, and a beam deflector (see Kashima et al., column 5, lines 14-27) -- not to the alleged existence of a prism sheet and a diffusion sheet having equal lengths, as alleged by the Examiner.

Moreover, it appears from the rejection and reasoning above that the Examiner relies exclusively upon what is actually shown in Figures 1 and 11 to find support for the relative physical dimensions of the sub-layers within the presently claimed sheet material. Indeed, it is respectfully submitted that specification of Kashima et al. is silent as to the relative dimensions of the sub-layers within its sheet material. Accordingly, Applicant respectfully submits that proportions of features in the drawings of Kashima et al. are not evidence of actual proportions (see M.P.E.P. § 2125). Therefore, Applicants respectfully submit Kashima et al. cannot be relied upon for purposes required by the present rejection under 35 U.S.C. § 103(a).

It is respectfully submitted that the arguments presented above were also presented in response to the Final Office Action of December 12, 2003 but, as yet, have not been fully addressed. Applicant respectfully requests, if the present rejection is to be maintained and repeated, that the arguments presented above be addressed and substantively answered (see M.P.E.P. § 707.07(f)).

The rejection of claim 32 under 35 U.S.C. § 103(a) as being unpatentable over the related art shown in Figures 1 and 2 in view of Nagakubo et al. is traversed and reconsideration is respectfully requested.

Claim 32 is patentable over the related art shown in Figures 1 and 2 in view of Nagakubo et al. in that claim 32 recites a combination of elements including, for example, “a lamp housing surrounding the lamp and arranged on a portion of the light guide... and a sheet material between the light guide and the second substrate, wherein the sheet material includes an uppermost sub-layer, and wherein the uppermost sub-layer is set apart from the lamp housing.” Neither the related art shown in Figures 1 and 2 nor Nagakubo et al., singly or in combination, teach or suggest at least these features of the claimed invention.

In rejecting claim 32, the Examiner cites the related art shown in Figures 1 and 2 as disclosing “a lamp housing (22)... [and] a sheet material (10) between the light guide (12) and the second substrate (6), and the sheet material (10) having an uppermost sub-layer such as a protective layer (10a)” but as failing to disclose “that the uppermost sub-layer is set apart from the lamp housing.” Attempting to cure the deficiency of the related art shown in Figures 1 and 2, the Examiner cites Nagakubo et al. as disclosing at “(col. 1, lines 13-33; Fig. 11) that a conventional ordinary liquid crystal display device is arranged such that successively laminated on the back surface of a liquid crystal panel (31) are a protection/diffusion sheet (32), lens sheets (33), and the uppermost sub-layer is the protection/diffusion sheet (32) which is set apart from the lamp holder (37) for improving the brightness of light.” The Examiner asserts “[i]t was common and known in the art that the lamp housing generates heat so that the uppermost sub-layer is set apart from the lamp housing would obtain more protection” and finally concludes “it would have been obvious... to arrange the uppermost sub-layer [of the related art shown in Figures 1 and 2] apart from the lamp housing” for two reasons: 1) “for achieving more protection;” and 2) “improving the brightness of light.” Applicant, however, respectfully disagrees.

As set forth at M.P.E.P. § 2143, establishment a *prima facie* case of obviousness requires, among other criteria, that there be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. § 2142 discloses that the teaching or suggestion to make the claimed combination must not be based on the Applicant’s disclosure. Applicant respectfully submits the Examiner’s assertion that “[i]t was common and known in the art that the lamp housing generates heat so that the uppermost sub-layer is set apart from the lamp housing would obtain more protection” and thus the conclusion that it would have

been obvious to modify the related art shown in Figures 1 and 2 with Nagakubo et al. allegedly “for achieving more protection” is not found in Nagakubo et al. Rather, the aforementioned suggestion is supported only by the Applicant’s disclosure (see the specification at, for example, page 4, lines 14-20 and page 7, lines 13-19). Therefore, Applicant respectfully submits the Examiner has failed to establish a *prima facie* case of obviousness with respect to claim 32 and requests withdrawal of the present rejection under 35 U.S.C. § 103(a).

With respect to the second reason for motivation cited by the Examiner, Nagakubo et al. discloses at column 1, lines 14-17, that “successively laminated on the back surface of a liquid crystal panel 31 are a protection/diffusion sheet 32; two lens sheets 33 disposed under the protection/diffusion sheet 32 for improving the brightness of light.” Accordingly, Applicant respectfully submits Nagakubo et al. fails to teach wherein “the protection/diffusion sheet (32)... is set apart from the lamp holder (37) for improving the brightness of light,” as asserted by the Examiner. Rather, the lens sheets 33, disposed under the protection/diffusion sheet 32, improves the brightness of light. Moreover, Nagakubo et al. lacks any teaching or suggestion that the “brightness of light” is improved merely because the protection/diffusion sheet (32) is set apart from the lamp holder (37), as asserted by the Examiner. For at least this reason, Applicant respectfully requests withdrawal of the present rejection under 35 U.S.C. § 103(a).

If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned at (202) 496-7500.

Application No.: 09/394,379
Amendment dated August 25, 2004
Reply to final Office Action dated May 26, 2004

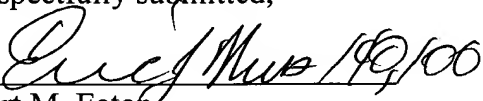
Docket No.: 8733.088.00-US

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: August 25, 2004

Respectfully submitted,

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